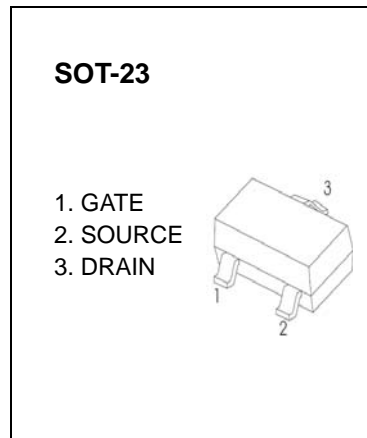
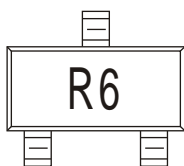


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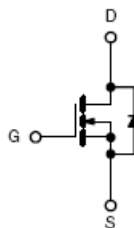
N-Channel Enhancement Mode Field Effect Transistor

$V_{(BR)DSS}$	$R_{DS(on)MAX}$	I_D
30V	65 mΩ@10V	3.6A
	105 mΩ@4.5V	

MARKING



Equivalent Circuit



Maximum ratings ($T_a=25^{\circ}C$ unless otherwise noted)

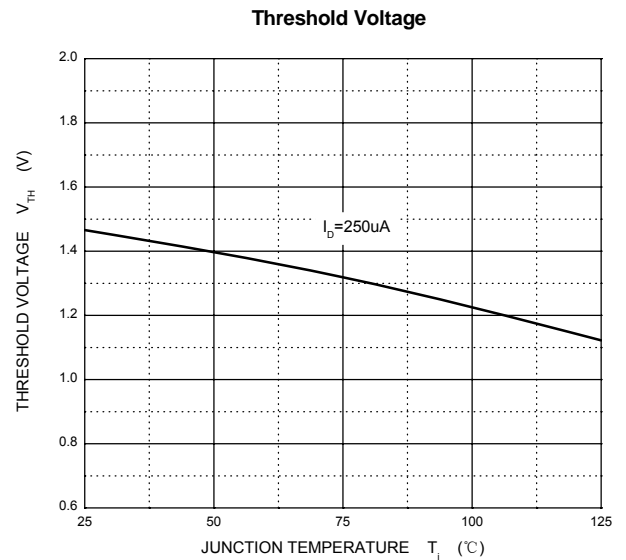
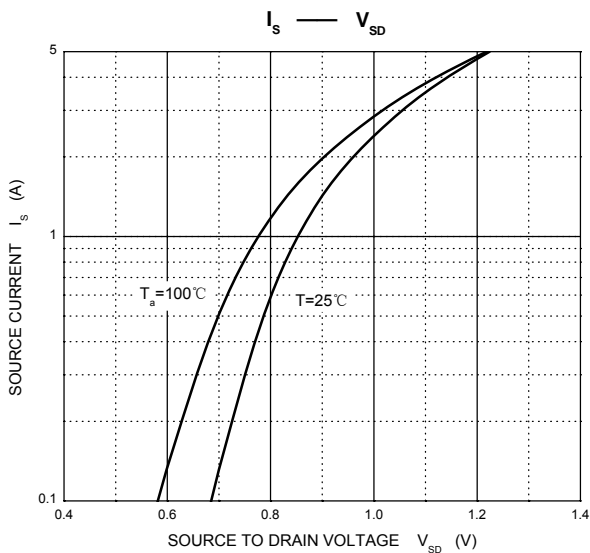
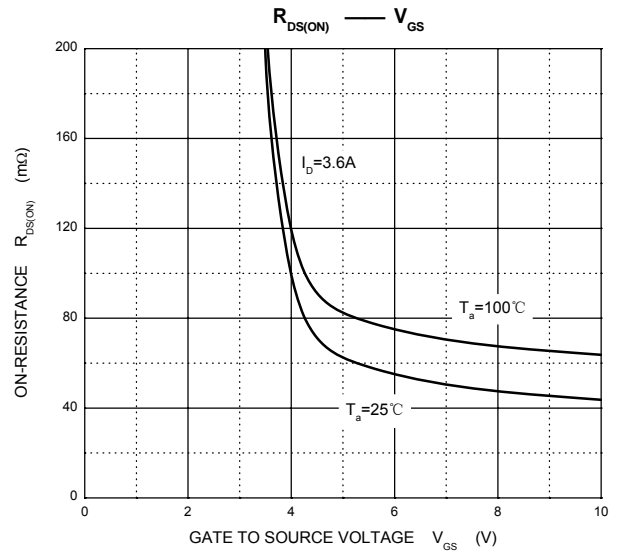
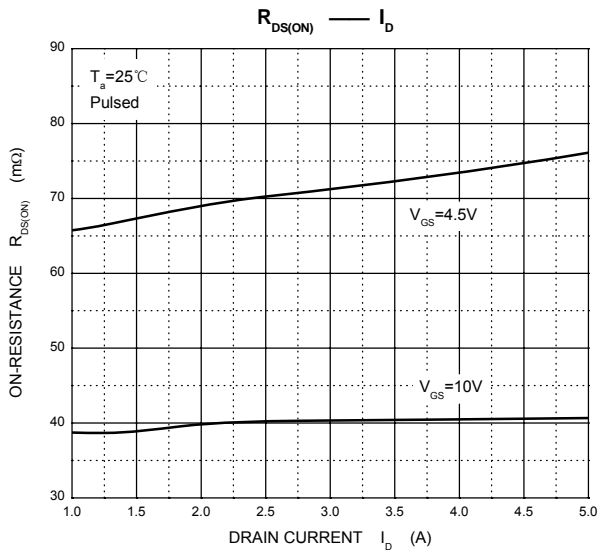
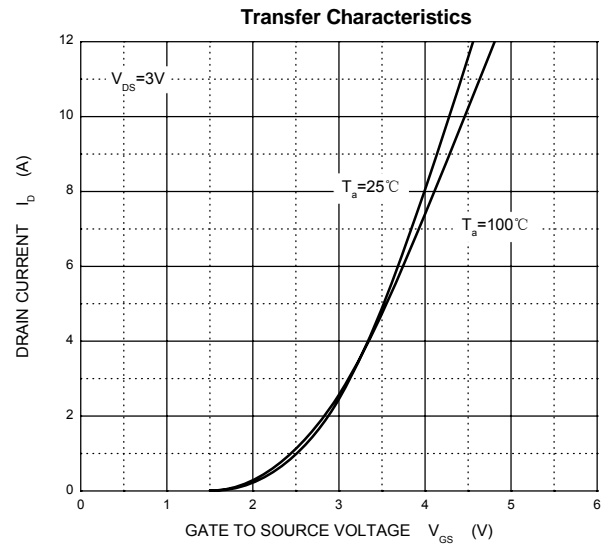
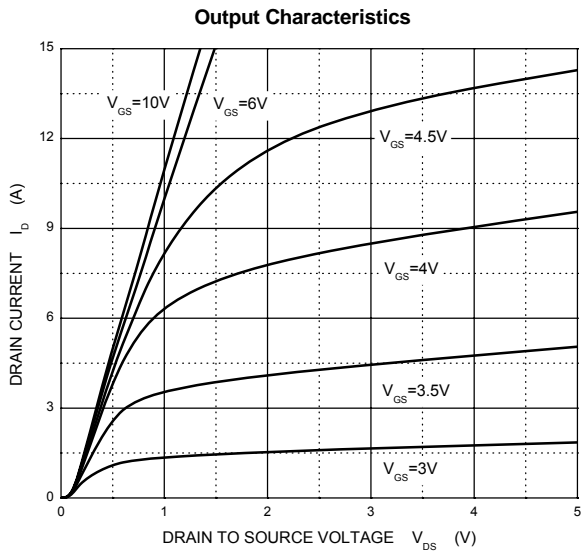
Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	I_D	3.6	A
Drain Current-Pulsed (note 1)	I_{DM}	15	A
Power Dissipation	P_D	0.35	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	357	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~ +150	°C

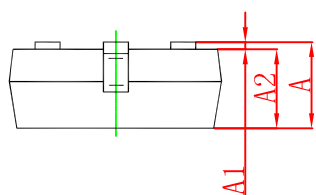
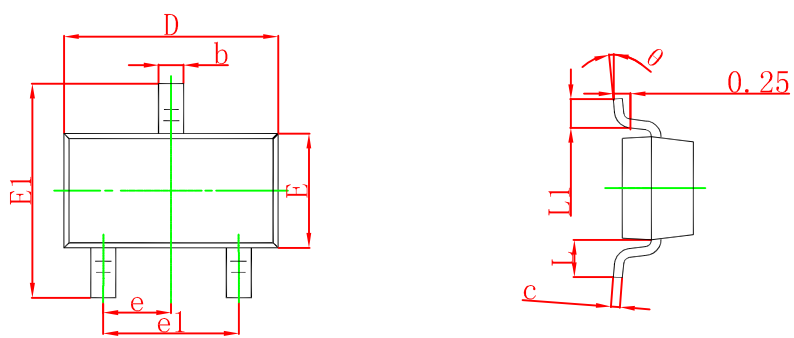
$T_a=25\text{ }^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test Condition	Min	Typ	Max	Units
STATIC PARAMETERS						
Drain-source breakdown voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	30			V
Zero gate voltage drain current	I_{DSS}	$V_{DS} = 24V, V_{GS} = 0V$			1	μA
Gate-body leakage current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0V$			± 100	nA
Gate threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250\mu A$	1		3	V
Drain-source on-resistance (note 2)	$R_{DS(on)}$	$V_{GS} = 10V, I_D = 3.6A$		40	65	m Ω
		$V_{GS} = 4.5V, I_D = 2.8A$		72	105	m Ω
Forward tranconductance (note 2)	g_{FS}	$V_{DS} = 5V, I_D = 3.6A$	3			S
Diode forward voltage	V_{SD}	$I_S = 1A$			1	V
DYNAMIC PARAMETERS (note 3)						
Input capacitance	C_{iss}	$V_{DS} = 15V, V_{GS} = 0V, f = 1MHz$			375	pF
Output capacitance	C_{oss}			57		pF
Reverse transfer capacitance	C_{rss}			39		pF
SWITCHING PARAMETERS (note 3)						
Turn-on delay time	$t_{d(on)}$	$V_{GS} = 10V, V_{DS} = 15V,$ $R_L = 2.2\Omega, R_{GEN} = 3\Omega$		4.6		ns
Turn-on rise time	t_r			1.9		ns
Turn-off delay time	$t_{d(off)}$			20.1		ns
Turn-off fall time	t_f			2.6		ns

Notes :

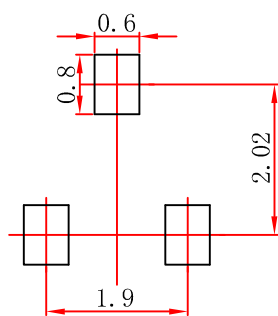
1. Repetitive Rating : Pulse width limited by maximum junction temperature.
2. Pulse Test : Pulse width $\leq 300\mu s$, duty cycle $\leq 0.5\%$.
3. These parameters have no way to verify.





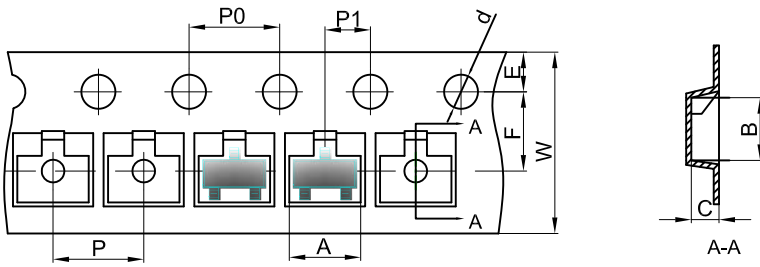
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



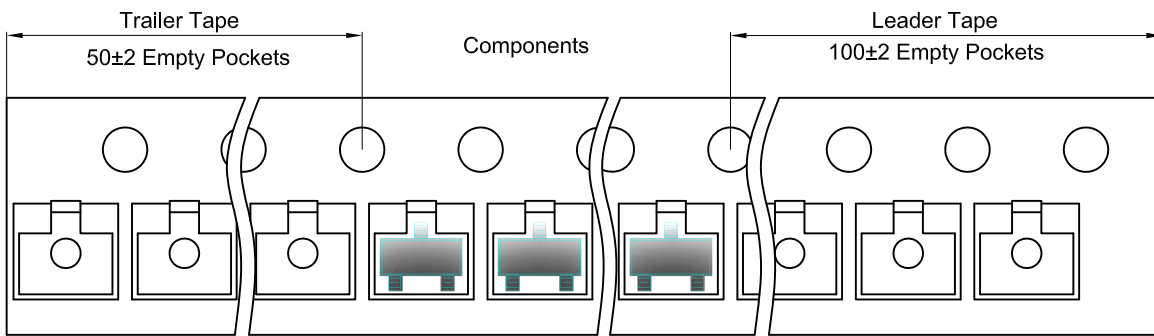
- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05 mm.
 3. The pad layout is for reference purposes only.

SOT-23 Embossed Carrier Tape

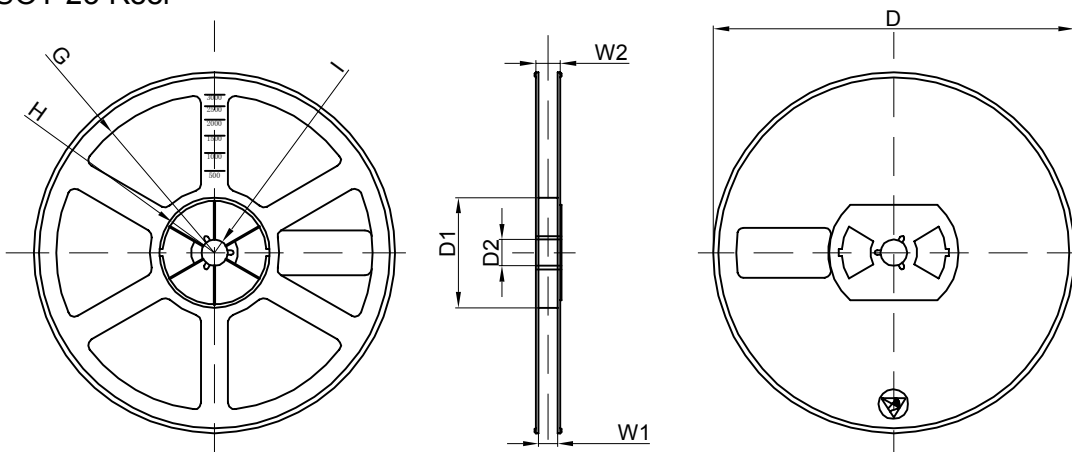


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer



SOT-23 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	
3000 pcs	7 inch	